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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/163,977	09/30/98	PARK J	Q51897

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EXAMINER	
TRAN, T	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/163,977	Applicant(s) PARK, JU-HA	
	Examiner Trang U. Tran	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) ~~*1-29*~~ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☒ Notice of References Cited (PTO-892)
16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18)☐ Interview Summary (PTO-413) Paper No(s). _____ .
19)☐ Notice of Informal Patent Application (PTO-152)
20)☐ Other: .

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Jan 29, 2001 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-3, 5-10, 12-15, 19-23, and 25-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Otsuki et al (U.S. Patent 5,929,932).

In consider claim 1, Otsuki et al discloses all claimed subject matter, note 1) the claimed receiving the program guide information and a program, and acquiring the program guide information for the received program is met by the tuner 2, the image processing circuit 3 and the

on-screen image producing circuit which is produce a menu screen, a program guide screen, or the like displayed with a program guide superimposed on images being displayed on TV (on-screen displayed) (Figs. 2 and 8, col. 5, lines 30-47), and 2) acquiring the remaining program guide information for each channel by scanning accessible channels while the program being received is not displayed is met by the operation section 5 which is provided with leftward, rightward, upward and downward cursor moving buttons 5a-5f (Figs. 2 and 8, col. 5, lines 47-63).

In consider claim 2, the claimed wherein said acquiring the program guide information for each channel comprises obtaining the program guide information of the accessible channels by a tuner while the program received by the tuner is not displayed is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25).

In consider claim 3, Otsuki et al discloses all claimed subject matter, note 1) the claimed acquiring program guide information of accessible channels in response to the program guide command is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25), 2) the claimed storing the acquired program guide information is met by the memory 9 (Fig. 2, col. 5, lines 64-67), 3) the claimed writing a

program list on the basis of the stored program guide information is met by the memory 9 (Fig. 2, col. 5, lines 64-67 and col. 7, line 60 to col. 8, line 20), 4) the claimed displaying the written program list to the user in response to the program guide command is met by display screen (Fig. 8, col. 8, lines 21-25).

In consider claim 5, the claimed determining whether the program guide information is effective by comparing a current time to an effective period of stored program guide information and proceeding to said writing the program list when the stored program guide information is effective, before said acquiring the program guide information is met by the time priority mode show in Fig. 10 (col. 9, line 25 to col. 10, line 19).

In consider claim 6, Otsuki et al discloses all claimed subject matter, note 1) the claimed writing and displaying a program list including the program guide information of channels tuned before a program guide command is executed from the stored program guide information is met by the display of the television guide (Fig. 8, col. 8, lines 21-25), and 2) the claimed acquiring the program guide information for each channel by searching for the accessible channels in a background operation while the program list is referred to is met by the cursor upward and downward (Figs 1-2 and 8, col. 1, lines 21-46 and col. 8, lines 21-25).

In consider claim 7, the claimed wherein said acquiring the program guide information comprises determining the sequence of accessing channels by proximity of channels to the channel tuned before the program guide command is executed is met by Fig. 20 which is show

the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

In consider claim 8, the claimed wherein said acquiring the program guide information comprises determining the order of priority of channels having the same proximity to the channel tuned before the program guide command is executed according to a channel up/down command input before corresponding channels are accessed is met by Fig. 20 which is show the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

In consider claim 9, the claimed wherein an upward or downward direction is preferential when no channel up/down command is executed is met by the cursor upward and downward (Figs 1-2 and 8, col. 1, lines 21-46 and col. 8, lines 21-25).

In consider claim 10, the claimed wherein said acquiring the program guide information comprises searching channels upward or downward from the channel tuned before the program guide command is executed is met by the cursor upward and downward (Figs 1-2 and 8, col. 1, lines 21-46 and col. 8, lines 21-25).

In consider claim 12, Otsuki et al discloses all claimed subject matter, note 1) the claimed writing and displaying a program list including program guide information of channels tuned before a program guide command is executed from stored program guide information is met by the tuner 2, the image processing circuit 3 and the on-screen image producing circuit which is produce a menu screen, a program guide screen, or the like displayed with a program guide

superimposed on images being displayed on TV (on-screen displayed) (Figs. 2 and 8, col. 5, lines 30-47), 2) the claimed acquiring program guide information for each channel by searching for accessible channels in a background operation while the program list is referred to is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25), 3) the claimed storing the acquired program guide information for each channel is met by the storing the channel guide in the memory 9 (Fig. 2, col. 5, lines 64-67 and col. 7, line 60 to col. 8, line 20), 4) the claimed rewriting a program list on the basis of the stored program guide information is met by the storing the channel guide in the memory 9 (Fig. 2, col. 5, lines 64-67 and col. 7, line 60 to col. 8, line 20), 5) the claimed displaying the rewritten program list to a user is met by the display of the television guide (Figs. 4-8, col. 6, line 30 to col. 8, line 25).

Claims 13-15 are rejected for the same reason as discussed in claims 7-9, respectively.

In consider claim 19, Otsuki et al discloses all claimed subject matter, note 1) the claimed a tuner tuning a channel is met by the tuner 2 (Fig. 2, col. 5, lines 35-40), 2) the claimed a program guide information detector detecting program guide information introduced via said tuner is met by the on-screen image producing circuit which is produce a menu screen, a program guide screen, or the like displayed with a program guide superimposed on images being displayed on TV (on-screen displayed) (Figs. 2 and 8, col. 5, lines 30-47), 3) the claimed a

memory storing the program guide information for each channel detected by said program guide information detector is met by the memory 9 (Fig. 2, col. 5, lines 64-67 and col. 7, line 60 to col. 8, line 20), 4) the claimed a key input introducing a user manipulation command such as a program guide command or a channel search command is met by the operation section 5 which is provided with leftward, rightward, upward and downward cursor moving buttons 5a-5f (Figs. 2 and 8, col. 5, lines 47-63), 5) the claimed a microprocessor, in response to the manipulation command input via said key input, that writes a program list based on program guide information stored in said memory, and searches for accessible channels by controlling said tuner in a background operation while a user refers to the program list is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25), 6) the claimed a character signal generator generating a character signal corresponding to the program list written by said microprocessor and providing the character signal to a screen is met by the on-screen display generator and the procedure for on-screen data generating processing performed when operation entry for displaying an on-screen is made (Fig. 18, col. 13, line 22 to col. 14, line 18).

In consider claim 20, the claimed wherein said microprocessor determines the sequence of accessing channels by the proximity between channels to the channel tuned before the program guide command is executed is met by Fig. 20 which is show the procedure for

processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

In consider claim 21, the claimed wherein said microprocessor determines the order of priority of channels having the same proximity according to a user's channel up/down command input via said key input before corresponding channels are accessed is met by Fig. 20 which is show the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

In consider claim 22, the claimed wherein said microprocessor searches for channels preferentially in an upward or downward direction when no channel up/down command is executed is met by the cursor upward and downward (Figs 1-2 and 8, col. 1, lines 21-46 and col. 8, lines 21-25).

In consider claim 23, the claimed wherein said microprocessor searches for channels upward or downward from the channel tuned before the program guide command is executed is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25).

In consider claim 26, the claimed wherein the accessible channels include channels accessed by a tuner and channels provided by a line input is met by the tuner 2 and the output (Fig. 2, col. 5, lines 35-40).

In consider claim 27, the claimed wherein said acquiring the program guide information comprises determining the sequence of accessing channels by proximity of the channels to the channel tuned and by a channel up/down command input just before a channel search is determined is met by Fig. 20 which is show the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

In consider claim 28, the claimed means for detecting program guide information corresponding to channels in relation to a tuned channel is met by Fig. 20 which is show the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61), and means for searching for accessible channels of the channels based upon a command received, the program guide information, and a relation to the tuned channel is met by the CPU 6 which controls the on-screen image producing circuit 4 on the basic of information from the operation section 5, and controls the tuner 2 for displaying a program designated by the user on the basic of the information from the operating section 5 (Figs, 1-2 and 8, col. 5, line 54 to col. 7, line 25).

In consider claim 29, the claimed wherein the means for searching searches the accessible channels in a preferential manner is met by Fig. 20 which is show the procedure for processing for producing a display table and an index of the first letters of the titles of programs (Figs. 20-23, col. 14, line 49 to col. 16, line 61).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuki et al (U.S. Patent 5,929,932).

In consider claim 4, Otsuki et al discloses all features of the instant invention as discussed in claim 3 above, except providing the claimed a message indicating that the user must wait until the program is written. However, the capability of displaying message indicated the user must wait until the program is written is well known and old in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Otsuki et al's system with the well known message in order to increase the efficiency system operation in Otsuki et al.

In consider claim 25, Otsuki et al discloses all features of the instant invention as discussed in claim 19 above, except providing the claimed wherein said microprocessor provides to said character signal generator a status message on the message screen in response to the program guide information of a corresponding channel not being stored. However, the capability of displaying a character signal for a status message indicated the corresponding channel not being stored is well known and old in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Otsuki et al's system with the well known

character for a status message indicated the corresponding channel not being stored in order to increase the efficiency system operation in Otsuki et al.

6. Claims 11, 16-18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuki et al (U.S. Patent 5,929,932) in view of Saitoh (US. Patent 5,444,499).

In consider claim 11, Otsuki et al discloses all the features of the instant invention except for providing the step of writing a probability distribution of tuned channels, and wherein said acquiring the program guide information comprises searching the channels are searched in an order of priority according to a probability distribution of channels. Saitoh teaches that the controller can calculates a probability that channels are to be selected, by accumulating a number of time which the channels are tuned (col. 5, lines 46-62) and searches for the channels in an order of priority according to a probability of tuning by the channels calculated (col. 6, lines 15-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide into Otsuki et al's system with the controller as taught in Saitoh in order to obtain the television guide without carrying out cumbersome tuning operations.

In consider claim 16, the claimed wherein said acquiring the guide information comprises searching channels upward or downward from the channel tuned before the program guide command is executed is met by the cursor upward and downward (Figs 1-2 and 8, col. 1, lines 21-46 and col. 8, lines 21-25) of Otsuki et al.

In consider claim 17, the claimed further comprising writing a probability distribution of tuned channels, and wherein the channels are searched for in order of priority according to the

probability distribution of channels is met by the search of channels base on the priority disclosed in Saitoh, column 6, lines 15-38 .

In consider claim 18, the claimed displaying the program guide information of a corresponding channel in response to acquiring the program guide information of channels tuned before the program guide command is executed being acquired in said acquiring the program guide information is met by the display of the television guide (Figs. 4-8, col. 6, line 30 to col. 8, line 25) of Otsuki et al. However, the combination of Otsuki et al and Saitoh explicitly do not disclose the claimed displaying a message indicating a status of program guide in response to the program guide information of a corresponding channel not being stored. The capability of displaying a message for a status indicated the corresponding channel not being stored is well known and old in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Otsuki et al's system with the well known message for a status indicated the corresponding channel not being stored in order to increase the efficiency system operation in Otsuki et al.

Claim 24 is rejected for the same reason as discussed in claim 11.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang Tran whose telephone number is (703) 305-0090.The examiner can normally be reached on Monday to Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reinhard J. Eisenzopf, can be reached on (703)305-4711.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

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or faxed to:

(703) 308-6306, (for formal communications intended for entry)

Or:

(703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

TT TT

June 1, 2001

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